Case No.: 55907US003

Remarks

Claims 30 to 47 are pending. Claims 1 to 19 have been canceled. Claims 20 to 29 have been withdrawn from consideration. Claims 30 to 47 have been added. Basis for the new claims is as follows:

| New claim | Original claim |
|-----------|----------------|
| 30 | 6, 7 |
| 31 | 1 |
| 32 | 2 |
| 33 | 3 |
| 34 | 4 |
| 35 | 5 |
| 36 | 8 |
| 37 | 9 |
| 38 | 10 |
| 39 | 11 |
| 40 | 12 |
| 41 | 13 |
| 42 | 14 |
| 43 | 15 |
| 44 | 16 |
| 45 | 17 |
| 46 | 18 |
| 47 | 19 |

Applicant's Agent thanks Examiner Oh for the opportunity to discuss the Rejection on July 17th, and for the further opportunity to discuss the rejection with Examiners Oh and Rotman on July 23rd. The outstanding rejections under 35 USC § 112, first paragraph were discussed, but no agreement was reached. Several potential new grounds of rejection under 35 USC § 112, first and second paragraphs were also discussed, but no agreement was reached. It was noted that the Office Action states that claims 3, 5, 7, 8, 11-13 15 and 19 would be allowable if written in independent

Case No.: 55907US003

form, but during the interviews it was asserted that the claims would be allowable if certain unidentified additional limitations were added to the claims. It was agreed that Applicants would respond to the outstanding Office Action, and this response may result in withdrawal on the Final Rejection.

With this response, new claim 30 corresponds to original claims 6 and 7. Claim 7 is said to be allowable if written in independent form. It is asserted that new claim 30 is therefore allowable.

During the interview of July 23rd, the Examiner objected to the word "about" appearing in the claims. Applicant's Agent asserted the M.P.E.P, at 2173.05, notes there is nothing inherently indefinite about the word and further that there is no rejection under 35 USC § 112, second paragraph as being indefinite. Nonetheless, in an effort to advance prosecution, the offending word has been eliminated from the new claims.

§ 112 Rejections

The rejection of claims 1, 2, 4, 6, 9, 10, 14, and 16 to 18 under 35 USC § 112, first paragraph, was maintained. The rejection is traversed. Applicant's response is directed to the new claims 30-47, which correspond to the rejected claims as indicated in the table above.

The following terms serve as the basis for the present rejections: "at least one fluorine-containing repeatable unit", "at least one fluorine-containing terminal group", "fluorinated polyol", "polyisocyanate", "monofunctional fluorine-containing compounds", "polymerizable groups", "water-solubilizing compounds", "electrophilic or nucleophilic moiety", "perfluoroalkyl", "perfluoroheteroalkyl", "perfluoroheteroalkylene", and "non-fluorinated polyol".

In Applicant's response dated February 26, 2003, each of these terms were described, and the enabling disclosure pointed out to the Examiner. Applicants argued that each of the terms was defined, more than sufficiently enabled by the disclosure, and the terms would be understood by the skilled artisan versed on organofluorine chemistry and fluorochemical textile treatments. Applicant's further pointed out that the disclosure was enabled by 76 working examples and 45 pages of example text.

Applicants requested that the Examiner consider the issue of the enablement based on the "Wand factors": consider the breadth of the claims, the nature of the invention, the state of the prior art, the level of one of ordinary skill, the level of predictability, the amount of direction

Case N .: 55907US003

provided, the existence of working examples, and the quantity of experimentation required to make of use the invention based on the content of the disclosure.

The Office action dated 5/21/2003 failed to address the Wand Factors, and further failed to follow the procedures of M.P.E.P 2164.01(a) to 2164.08. Specifically, M.P.E.P 2164.08 requires that "the Examiner should determine what each claim recites and what the subject matter is when the claim is considered as a whole, not when its parts are analyzed individually.

Applicant submit the Examiner has not met the requirements of M.P.E.P 2164.04; that a reasonable explanation has not been provided as to why the scope of protection provided by the claims are not adequately enabled by the disclosure. The rules clearly states that "[a] disclosure which contains a teaching of the manner and process of making and using an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken as in compliance with the enablement requirement of 35 USC § 112, first paragraph, unless there is reason to doubt the objective truth of the statement contained therein which must be relied on for enabling support." The Office Actions provided no reasons for uncertainty of enablement. Further, while it is not necessary for the Office Actions to provide a discussion of each of the Wand Factors, the rejection fails to provide the factors, reasons and evidence that lead the Examiner to conclude that the specification fails to teach how to make and use the claimed invention, without undue experimentation, or that the scope of the claims are not commensurate with the scope of enablement.

During the interview of July 23rd, the Examiner repeatedly asserted that the objectionable claims and claim terms were "too broad". Applicants again assert that the supposed breadth of the claim terms is not a sufficient basis for rejection of the claims under 35 USC § 112, first paragraph. Proper analysis of the rejection requires first that the claim as a whole be considered. As required by M.P.E.P 2164.08, the Examiner must first consider how broad the claim is with respect to the disclosure, and next to determine if one skilled in the art is enabled to use the entire scope of the claimed invention without undue experimentation. Further, if the Examiner considers the claim terms indefinite, a proper rejection would be under 35 USC § 112, second paragraph. However, no such rejection has been made.

Ignoring the fact that broad claims and broad claim elements are not inherently unpatentable or inappropriate, Applicants do not believe that the claims or claim elements are unduly broad.

Original claim 1 recited a fluorochemical urethane comprising the reaction product of three

Case No.: 55907US003

components. New claim 30 (derived from original claims 6 and 7) recites a specific fluorochemical urethane structure. New claim 31 depends from new claim 30 and recites the "reaction product" limitations of original claim 1. All of the claims are fully enabled with reference to the specification. As required in M.P.E.P 2164.08, "[a]s concerns the breadth of a claim relevant to enablement, the only relevent concern should be whether the scope of enablement provided to one skilled in the art by the disclosure is commensurate with the scope of protection sought by the claims". Applicants submit that the scope of the claims is entirely consistent with the disclosure, and one skilled in the art would be able to practice the invention, without undue experimentation.

The record of the Office Actions is also unclear as to the specific terms and scope of the terms that are found not to be enabled. With reference to the Office Action dated 12/27/2002, at page 3 it states:

"the specification, while enabling for one fluorine-containing repeat unit, such as perfluoroalkyl, perfluoroalkylene, perfluoroalkyl, and perfluoroheteroalkylene, does not reasonably provide enablement for any fluorine-containing repeatable unit."

Then on page 6 of the same Office Action it states:

"[t]he specification, while enabling for one perfluoroalkyl group, such as perfluoropropyl, perfluorobutyl, perfluoroctyl, and etc., does not reasonably provide enablement for all the perfluoalkyl groups in the field of organic chemistry."

In the first instance it appears that the Examiner finds the term "perfluoroalkyl" enabled, and in the second instance rejects the use of the same term in favor of specific perfluoroalkyl groups such as a perfluoropropyl group. Similar issues are raised with respect to the terms perfluoroheteroalkyl and perfluoroheteroalkylene on pages 6 and 7 of the same Office Action. Clarification is respectfully requested.

During the interview of July 23rd, it was suggested that the rejections could be overcome by amending to include a Markush group of component reactant. For example, it was suggested that the term "polyisocyanate" be amended to recite a Markush group of polyisocyanates from the specification. Specific polyisocyanates are described on pages 11 and 12, and list approximately 50 specific polyisocyanate compounds on 31 lines of text. Applicants do not

Case No.: 55907US003

believe this is appropriate, and would unduly limit the scope to which they are entitled. Further, it is not necessary that everything in the specification must be read into the claims.

During the interview of July 23rd, it was suggested that the rejections could be overcome by amending original claim 1 to a product-by-process claim. Original claim 1 (corresponding in part to new claim 31) recited a fluorochemical urethane comprising the reaction product of a.b. and c. A hypothetical product-by-process claim might read "a fluorochemical urethane prepared by the step of reacting a, b, and c. Applicant's Agent does not understand an appreciable difference between the two claim constructions, or why this suggested amendment might overcome the enablement rejections. Clarification of the Examiner's position is respectfully requested.

In summary, Applicants submit that the rejection of the claims under 35 USC § 112, first paragraph, has been overcome, and that the rejection should be withdrawn.

Objections

The objection to claim 7 is maintained, the Examiner asserting that the table format is improper. Applicants disagree, but in an effort to advance prosecution, claim 7 has been cancelled and replaced by new claim 30, in which the table format has been eliminated.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. Allowance of claims 30 to 47, at an early date is solicited.

Respectfully submitted

Kent S. Kókko, Reg. No.: 33,931

Telephone No.: (651) 733-3597

Office of Intellectual Property Counsel 3M Innovative Properties Company

Facsimile No.: 651-736-3833